

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S) Alexander L. Barr et al GROUP ART UNIT: 2823
APPLN. NO.: 10/780,143 EXAMINER: William D. Coleman
FILED: February 17, 2004
TITLE: SEMICONDUCTOR STRUCTURE HAVING STRAINED
SEMICONDUCTOR AND METHOD THEREFOR

Certificate of Submission

I hereby certify that this correspondence is being submitted to the
U.S.P.T.O., Alexandria, VA.

- ☐ Addressed per C.F.R. § 1.1(a) and deposited with the United
States Postal Service with sufficient postage as first class mail.
- ☐ Facsimile transmitted in accordance with C.F.R. § 1.6(d).
- ☒ Submitted electronically via EFS in accordance with "Legal
Framework for EFS Web".

8-16-06

Date of Submission

Signature

Printed Name of Person Signing Certificate

STATEMENT FOR REASONS FOR PRE-APPEAL BRIEF REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Responsive to the Final Office Action dated March 14, 2006, please enter the following
remarks in the above-entitled application, without prejudice or disclaimer.

STATEMENT

Claims 1-13 and 15-24 are under final rejection. Claim 14 is allowed. Claims 1-24 remain in the application. Applicants submit that these claims are allowable over the cited art.

The Examiner used two references as each being anticipating references. The Examiner pointed out that Jeong teaches a strained silicon layer. Applicants agree that strained silicon is mentioned in the title, in the summary, and in claims 16 and 17. The summary, however, is not clear as to what layers are being discussed, especially the one that is considered strained. The claims are equally difficult to comprehend because they don't appear to be supported by the specification.

In Yamazaki, on the other hand, applicants still have not been able to find a description of strain. The Examiner has taken the position that the SiGe carrier substrate in Yamazaki layer is strained although applicants have not found any basis for such a belief. Applicants have not found any statement that the SiGe carrier substrate is strained. Further, applicants do not see how a carrier in Yamazaki's case can be strained because it is by the far the largest thickness so there is no other layer to keep it from becoming relaxed. SiGe is capable of being relaxed and will, like other materials, become relaxed in the absence of something to constrain the relaxation. Although applicants do not necessarily agree that Jeong's teaching on strain is sufficient to provide a relevant teaching with respect to applicants' invention, applicants believe that the lack of relevant strain in the cited prior art is not the only grounds for a patentable distinction.

Crystalline orientation or plane versus crystalline direction is another distinction. Orientation, or at least a family of orientations, is designated by standard convention with parentheses, (), which is consistent with Jeong's designation and nomenclature. Similarly, curly brackets, {}, which are used by Yamazaki, designate a plane as a particular orientation of a family of orientations. Applicants, in contrast, are claiming direction. Jeong, for example, teaches that the two preferred orientations are (100) and (110). Both of these orientations are likely to have the same direction of either $\langle 100 \rangle$ or the $\langle 110 \rangle$. Applicants could not find any basis in Jeong for the inference that one orientation would have a different direction than the other orientation. Jeong and Yamazaki both are teaching different orientations, but neither are teaching different directions for different orientations. Because the effects of orientation and

direction are not the same, applicants submit that it is improper to infer that there is a teaching as to direction based on a teaching as to orientation. Accordingly, applicants submit that all of the claims are patentably distinct from Yamazaki and Jeong.

Conclusion

The Office Action contains numerous statements characterizing the claims, the Specification, and the prior art. Regardless of whether such statements are addressed by applicants, applicants refuse to subscribe to any of these statements, unless expressly indicated by applicants.

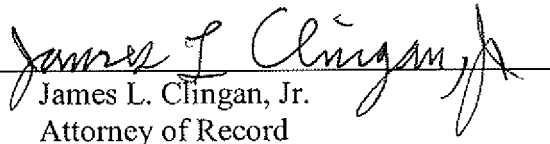
Thus applicants believe the application is in condition for allowance which action is respectfully solicited. Please contact the below-signed if there are any issues regarding this communication or otherwise concerning the current application.

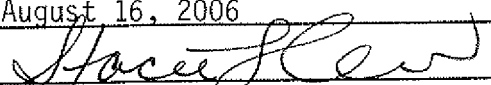

Respectfully submitted,

SEND CORRESPONDENCE TO:

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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on <u>August 16, 2006</u> Signature <u></u> Typed or printed name <u>Stacie Herrera</u>		Application Number	Filed
		10/780,143	2/17/2004
		First Named Inventor	
		Alexander Barr et al	
		Art Unit	Examiner
		2823	William D. Coleman
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.			
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the		 Signature	
<input type="checkbox"/> applicant/inventor.		James L. Clingan, Jr. Typed or printed name	
<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)			
<input checked="" type="checkbox"/> attorney or agent of record. 30,163		(512) 996-6839	
Registration number		Telephone number	
<input type="checkbox"/> attorney or agent acting under 37 CFR 1.34.		August 16, 2006	
Registration number if acting under 37 CFR 1.34		Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
<input checked="" type="checkbox"/> *Total of _____ forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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